Safety Data Sheet

Revision Date: 4/6/2022

Section 1: Chemical Identification

1.1 Chemical Identification

Product Name: Immobilized Pepsin Agarose Resin
Alternative Name:
Catalog Number: I-030

1.2 Relevant Uses and Uses Advised Against

Recommended use: This product is not for use in humans. It is for research purposes only.

1.3 Supplier Contact Information

Distributed by: Gold Biotechnology, Inc.
1328 Ashby Rd.
St. Louis, MO 63132
Phone: (314) 890-8778
Fax: (314) 890-0503
Email: **contactgoldbio86@goldbio.com**

1.4 Emergency Contact Information

Emergency Phone: (800)248-7609 (Monday-Friday, 9:00 a.m. – 5:00 p.m. CST)

Section 2: Hazardous Information

2.1 GHS Classification

Acute Toxicity, Oral (Category 4)
Respiratory Sensitizer (Category 1)
Chronic Aquatic Toxicity (Category 3)
Acute Aquatic Toxicity (Category 3)

2.2 GHS Label Elements, Including Precautionary statements

DANGER!

2.3 Hazard Statements

H302: Harmful if swallowed
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled
H402: Harmful to aquatic life
H412: Harmful to aquatic life with long lasting effects

2.4 Precautionary Statements

P261: Avoid breathing dust/fume/gas/mist/vapours/spray
P264: Wash skin thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P273: Avoid release to the environment
P284: Wear respiratory protection
P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P304+341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
P330: Rinse mouth
P342+311: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician
P501: Dispose of contents/container to an approved waste disposal plant

Section 3: Composition/Information on Ingredients

3.1 Composition

Identity:	Pepsin A
IUPAC:	
Synonyms:	
CAS Number:	9001-75-6 [<2%]
Molecular Formula:	n/a
Molecular Weight:	35 kDa

Identity:	Agarose Resin
IUPAC:	
Synonyms:	
CAS Number:	9012-36-6 [~50% v/v]
Molecular Formula:	n/a
Molecular Weight:	n/a

Identity:	Sodium Acetate
IUPAC:	
Synonyms:	NaOAc
CAS Number:	127-9-3 [~50% v/v]
Molecular Formula:	$C_2H_3NaO_2$
Molecular Weight:	82.03 g/mol

Identity:	Sodium azide
IUPAC:	
Synonyms:	Hydrazoic acid sodium salt
CAS Number:	26628-22-8 [<2%]
Molecular Formula:	NaN_3

Molecular Weight: 65.01 g/mol

Section 4: First Aid Measures

4.1 Detailed First Aid Measures

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Skin: Immediately wash skin copiously with soap and water. Take victim immediately to hospital. Consult a physician.

Eye: Immediately rinse out with water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Consult a physician.

Ingestion: Wash out mouth with water. Drink plenty of water. Consult a physician. Never give anything by mouth to an unconscious person.

Notes to Physician: Treat symptomatically and supportively.

4.2 Most Important Symptoms And Effects, Either Acute Or Delayed

The most important known symptoms and effects are described in the labeling (see section2). And /or in section 11.

4.3 Indication of immediate medical attention and special treatment needed

Not available

Section 5: Fire Fighting Measures

5.1 Conditions of flammability:

Not flammable or combustible.

5.2 Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.3 Specific hazards arising from the chemical

During a fire, highly toxic gases may be generated by thermal decomposition or combustion – Unknown.

5.4 Specific protective actions for fire-fighters:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

6.2 Environmental precautions:

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up:

Soak up with absorbent material, discard.

Section 7: Handling and Storage

7.1 Precautions for safe handling:

Always wear personal protective equipment (PPE, see section 8).

7.2 Conditions for safe storage, including and incompatibilities:

Keep container tightly closed.

store at 4°C. Do NOT freeze.

Section 8: Exposure Controls / Personal Protection

8.1 Control Parameters:

Sodium Azide: 0.29 mg/m³ (Sodium azide, as sodium azide; USA; Momentary value; TLV - Adopted Value)
Sodium Azide: 0.11 ppm (Sodium azide, as hydrazoic acid vapor; USA; Momentary value; TLV - Adopted Value)

8.2: Appropriate engineering controls:

Contains no substances with occupational exposure limit values.

8.3 Personal Protective Equipment (PPE):

Eye/Face Protection: Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique - without touching outer surface of glove - to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Other Protective Clothing or Equipment: Wear appropriate protective clothing to prevent exposure.

Section 9: Physical and Chemical Properties

9.1 General chemical and physical properties

Appearance:	Liquid suspension
Odor:	Not Available
Odor Threshold:	Not Available
pH:	4.4
Melting Point:	Not Available
Freezing Point:	Not Available
Boiling Point/Range:	Not Available
Flash Point:	Not Available
Evaporation Rate:	Not Available
Lower Explosion Limit:	Not Available
Upper Explosion Limit:	Not Available
Vapor Pressure:	Not Available
Vapor Density:	Not Available
Relative Density:	Not Available
Solubility:	Not Available
Partition Coefficient n-octanol/water:	Not Available
Auto-Ignition Temperature:	Not Available
Decomposition Temperature:	Not Available
Viscosity:	Not Available

Section 10: Stability and Reactivity Data

10.1 Reactivity:

Not available

10.2 Chemical Stability:

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions:

Not available.

10.4 Conditions to avoid:

Incompatible materials.

10.5 Incompatible materials:

Strong oxidizing agents.

10.6 Hazardous decomposition products:

Hazardous decomposition products formed under fire conditions. - Unknown.

Section 11: Toxicological Information

11.1 Toxicological effects

Acute toxicity:

Pepsin A	Oral:	ATE US (oral): 1350 mg/kg body weight
Sodium azide	Oral:	Rat LD_{50}: 27 mg/kg
Sodium azide	Oral:	ATE US (oral): 27 mg/kg body weight

Skin corrosion/irritation:

Not available.

Respitory or skin sensitization:

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity:

Not available.

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity:

Not available.

STOT-single exposure:

Not available.

STOT-repeated exposure:

Not available.

Aspiration hazard:

Not available.

Likely routes of exposure:

Respiratory organs, mouth, skin, and eyes.

Symptoms of exposure:

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12: Ecological Information

12.1 Toxicity:

Harmful to aquatic life with long lasting effects. Harmful to aquatic life.
Fish: LC_{50} 0.8 mg/l (LC50; 96 h)
Daphnia: EC_{50} 4.2 mg/l (EC50; 48 h)

12.2 Persistence and degradability:

Inherent biodegradability.

12.3 Bioacumulative potential:

Does not bioaccumulate.

12.4 Mobility in soil:

Not available.

12.5 Other adverse effects:

None.

Section 13 Disposal Considerations

Dispose of product in accordance with local rules and regulations.

Section 14: Transport Information

14.1 US Department of Transportation (DOT)

This material is considered to be non-hazardous for transport.

14.2 International Maritime Dangerous Goods (IMDG):

This material is considered to be non-hazardous for transport.

14.2 International Air Transportation Association (IATA)

This material is considered to be non-hazardous for transport.

Section 15: Regulatory Information

SARA 302 Components:

SARA 302: SARA Section 302 Threshold Planning Quantity (TPQ) - Sodium azide (500 lb)

SARA 313 Components:

SARA 313: Sodium azide is listed on the United States TSCA (Toxic Substances Control Act) inventory. Subject to reporting requirements of United States SARA Section 313

SARA 311/312 Hazards:

No SARA Hazards.

Massachusetts Right To Know Components: CAS - No.

Pepsin A	9001-75-6 [<2%]
Sodium Acetate	26628-22-8 [<2%]
Pennsylvania Right To Know Components:	CAS - No.
Pepsin A	9001-75-6 [<2%]
Sodium Acetate	26628-22-8 [<2%]
New Jersey Right To Know Components:	CAS - No.
Pepsin A	9001-75-6 [<2%]
Sodium Acetate	26628-22-8 [<2%]

California Prop. 65 Components:

This product does not contain any chemical known to the State of California to cause cancer, birth, or any other reproductive defects.

Section 16: Other Information

While Gold Biotechnology, Inc. believes the information contained herein to be true and accurate, it has relied on information provided by others. Gold Biotechnology, INC. makes no warranties, express or implied, as to the accuracy or adequacy of the information contained herein or with respect to the results to be obtained from the use of the product. Gold Biotechnology, Inc. disclaims all liability with respect to the use of this product, including without limitation, liability for injury to the user or third-party persons.

Preparation Information
Gold Biotechnology
Content/Marketing Department
(800) 248-7609
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